

FEB 22 2006

Permit No.: 06S1261P6063
Scan Code: 07

REPLY TO: 6WQ-S

Certified Mail #7000 0520 0022 2558 2161 - Return Receipt Requested

Sullivan and Company L.L.C.
1437 S. Boulder, Suite 1030
Tulsa, Oklahoma 74119
Attn: Mr. Lee Troiani

Re: Draft UIC Permit and Statement of Basis
Permit No. 06S1261P6063 - Osage County, Oklahoma

Dear Mr. Troiani:

Enclosed are the public notice, statement of basis, and the permit which have been drafted by this Agency under the authority of the Safe Drinking Water Act. Any comments you wish to make may be submitted in writing by the due date stated in the public notice to Ms. Evelyn Rosborough at the EPA address above.

The Bureau of Indian Affairs (BIA) also requires that you apply for and receive authorization to complete the work described in the referenced permit application. Both EPA and BIA authorizations must be received prior to the commencement of this work. Please contact the BIA office at (918) 287-1351 for further information.

If you have any questions, or would like to discuss this permit, please contact the permit writer, Mr. Bill Hurlbut at (214) 665-8305.

Sincerely yours,

Larry D. Wright
Chief
Source Water Protection Branch

Enclosures

cc: with enclosures

BIA, Minerals Branch

Osage UIC Office 1/4/06

6WQ-SG: BHURLBUT: 1/4/06: 06S1261P6063.3

6WQ-SG

DELLINGER

for PD

FEB 22 2006

Permit No.: 06S1261P6063
Scan Code: 20

REPLY TO: 6WQ

Certified Mail #7000 0520 0022 2558 2161 - Return Receipt Requested

Sullivan and Company L.L.C.
1437 S. Boulder, Suite 1030
Tulsa, Oklahoma 74119
Attn: Mr. Lee Troiani

Re: Emergency Permit - Permit No. 06S1261P6063
Osage County, Oklahoma

Dear Mr. Troiani:

Regulations at 40 C.F.R. §147.2906 provide for issuance of emergency permits to avoid a substantial delay in oil and gas production. In accordance with the provisions of those regulations, an emergency permit is issued to Sullivan and Company L.L.C. for construction and injection into Well No. 6-9, located in Osage County, Oklahoma at 147' FNL, 1941' FEL, NE Quarter, Section 9, Township 24N, Range 06E.

As permittee, you are authorized to inject salt water for disposal under the following conditions:

1. Mechanical integrity of the well must be demonstrated, to the satisfaction of the EPA, prior to injection.
2. The permittee is authorized to inject salt water into the Arbuckle formation at an injection interval depth of 3405 to 4645 feet below land surface.
3. Injection shall not result in the movement of fluid into an Underground Source of Drinking Water (USDW). The operating injection pressure at the wellhead shall not exceed 200 psig.
4. Injection volume shall be limited to a maximum of 1,050,000 barrels per month.

6WQ-SG: BHURLBUT: 1/4/06: 06S1261P6063.6

6WQ-SG 6WQ-S

DELLINGER WRIGHT

BA *for*

5. During the emergency authorization period, the owner/operator shall comply with UIC regulations at 40 C.F.R. §147.

A complete permit application has been submitted. Emergency authorization to inject shall remain in effect until EPA issues a final decision on the permit application. Failure to abide with the above requirements is a violation of the Safe Drinking Water Act and may result in enforcement action.

If you have any questions, or would like to discuss this emergency permit, please contact the permit writer, Mr. Bill Hurlbut at (214) 665-8305.

Sincerely yours,

Miguel I. Flores
Director
Water Quality Protection Division

cc: BIA, Minerals Branch
Osage UIC Office

U.S. Postal Service CERTIFIED MAIL RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)	
Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$
Postmark Here	
Recipient's Name (Please Print Clearly) (To be completed by mailer) SULLIVAN & CO. LLC Street, Apt. No.; or PO Box No. 1437 S. BOULDER, SUITE 1030 City, State, ZIP+4 TULSA, OK 74119	

7000 0520 0022 2558 2161

PS Form 3800, February 2000 See Reverse for Instructions

U.S. Environmental Protection Agency
Public Notice of Draft UIC Permit(s)

FEBRUARY 23, 2006

This is to give notice that the U.S. Environmental Protection Agency, Region 6, has formulated a Draft Permit for the following facility (facilities) under the Osage Mineral Reserve, Osage County, Oklahoma, Underground Injection Control (UIC) Program of the Safe Drinking Water Act. Development of the draft permit(s) was based on a preliminary staff review by EPA. The permit(s) will become effective within 15 days after the close of the comment period unless:

- A. Comments received by MARCH 9, 2006, in accordance with §124.20, warrant a public notice of EPA's final permit decision.
- B. A public hearing is held requiring delay of the effective date.

EPA's contact person for submitting written comments, requesting information regarding the draft permit, and/or obtaining copies of the permit and the Statement of Basis is:

Diane Smith
Customer Service Branch (6WQ-NP)
U.S. Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202-2733
(214) 665-2145

EPA's comments and public hearing procedures may be found at 40 CFR 124.10 and 124.12 (48 Federal Register 14264, April 1, 1983, as amended at 49 Federal Register 38051, September 26, 1984). Additional procedures pertaining to Osage County may be found at 40 CFR 147.2929(d), Subpart GGG. The comment period during which written comments on the draft permit may be submitted extends 15 days from the date of this Notice. During the comment period, any interested person may request a Public Hearing by filing a written request which must state the issues to be raised. A public hearing will be held when EPA finds a significant degree of public interest.

EPA will consider all comments submitted either in writing or at a public hearing when making its final permit decision. Any person that files comments on the draft permit may appeal the final permit decision. Persons who did not comment on the draft permit may appeal only those changes made to the final permit subsequent to draft permit issuance. Appeals to the final permit decision must be submitted in writing to the Administrator within 30 days after a final permit decision has been issued. An appeal must contain the information set out in 40 CFR 124.19 and 147.2929(j)(3).

EPA will notify the applicant and each person who has submitted written comments or requested notice of the final permit decision. A final permit decision means a final decision to issue, deny, modify, revoke or reissue, or terminate a permit. If a request for review of a final permit is granted, EPA will follow procedures found at 40 CFR 127.2929.

Further information including the administrative record is available for public review Monday through Friday from 8:00 a.m. to 4:00 p.m. at the Osage UIC Office, 100 West Main, Suite 304, Osage Agency Campus, P.O. Box 1495, Pawhuska, OK 74056 or at the EPA address referenced above. It is recommended that you write or call for an appointment so the record(s) will be available at your convenience.

The Environmental Protection Agency (EPA) has received a complete Underground Injection Control (UIC) permit application number 06S1261P6063 from

Sullivan and Company L.L.C.
1437 S. Boulder, Suite 1030
Tulsa, Oklahoma 74119

The permittee proposes to construct well number 6-9, a salt water disposal injection well located in the NE Quarter, Section 9, Township 24N, Range 06E, Osage County, Oklahoma. The application requests authorization to inject salt water into the Arbuckle formation at an injection interval depth of 3405 to 4645 feet for disposal. The Underground Source of Drinking Water is at a depth of 395 feet below land surface. A maximum of 1,050,000 barrels/month will be injected at a maximum pressure of 200 psig.

EPA has issued emergency authorization to the permit applicant to inject salt water into the referenced well. The emergency authorization shall remain in effect until EPA issues a final decision on the permit application.

The permit application, supporting data submitted by the applicant, the EPA draft permit and statement of basis are available for public review Monday through Friday from 8:00 a.m. to 4:00 p.m. at the Osage UIC Office, 627 Grandview Avenue, Osage Agency Campus, P.O. Box 1495, Pawhuska, OK 74056, (918)287-4041 or at the Environmental Protection Agency, 1445 Ross Avenue, Dallas, TX 75202-2733, (214)665-7165. Comments on the permit application and draft permit should be submitted to the Dallas office within 15 days of the date of this notice. Anyone desiring such a hearing must submit a written request, identifying the issue(s) for discussion at the hearing, to the EPA office in Dallas, Texas, before the close of business on the last day of the comment period. EPA will give at least 30 days notice of the public hearing, if a hearing is held.

Permit No.: 06S1261P6063

Scan Code: 07

The Environmental Protection Agency (EPA) has received a complete Underground Injection Control (UIC) permit application number 06S1261P6063 from

Sullivan and Company L.L.C.
1437 S. Boulder, Suite 1030
Tulsa, Oklahoma 74119

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The permit application, supporting data submitted by the applicant, the EPA draft permit and statement of basis are available for public review Monday through Friday from 8:00 a.m. to 4:00 p.m. at the Osage UIC Office, 627 Grandview Avenue, Osage Agency Campus, P.O. Box 1495, Pawhuska, OK 74056, (918)287-4041 or at the Environmental Protection Agency, 1445 Ross Avenue, Dallas, TX 75202-2733, (214)665-7165. Comments on the permit application and draft permit should be submitted to the Dallas office within 15 days of the date of this notice. Anyone desiring such a hearing must submit a written request, identifying the issue(s) for discussion at the hearing, to the EPA office in Dallas, Texas, before the close of business on the last day of the comment period. EPA will give at least 30 days notice of the public hearing, if a hearing is held.

BH 11/4/06
6WQ-SG: BHURLBUT:1/4/06: 06S1261P6063.5

6WQ-SG

DELLINGER

BH 11/4/06

Permit No.: 06S1261P6063

Scan Code: 07

January 4, 2006
STATEMENT OF BASIS

For proposed Underground Injection Control Permit No.06S1261P6063 to construct a salt water disposal injection well.

Issuing office: U.S. Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

Applicant: Sullivan and Company L.L.C.
1437 S. Boulder
Tulsa, Oklahoma 74119

1. As described in the application, the well is located in Osage County, Oklahoma, 147' FNL, 1941' FEL, NE/4, Section 9, Township 24N, Range 06E.
2. On the basis of preliminary staff review, the Environmental Protection Agency has made a tentative determination to draft a permit for the construction of this well as described in the application.
3. The following is an explanation of the derivation of the conditions of the draft permit and the basis for them as required under 40 CFR §147.2929 dated November 15, 1984:

40 CFR §147.2904

The area around the proposed injection well or project must be evaluated to ensure that the proposed injection will not cause movement of fluid into an Underground Source of Drinking Water (USDW) through improperly sealed, completed, or abandoned wells. The permit applicant submitted information on all wells of public record penetrating the injection interval within 1/4 mile of the proposed injection site and requested an average injection rate of 900,000 barrels per month (B/M) and not to exceed 1,050,000 B/M.

BH 1/4/06
6WQ-SG: BHURLBUT: 1/4/06: 06S1261P6063.2

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DELLINGER WRIGHT

BH for RD

EPA did not calculate a "zone of endangering influence" (the lateral area around the proposed injection in which injection pressures may cause movement of fluid into a USDW) because the permeability of the Arbuckle is so high due to fractures, that pressure buildup is not a concern.

40 CFR §147.2919(a)

The well must be sited so that injection is into a formation which is separated from USDWs by a confining zone free of known open faults or fractures within the area of review. The proposed injection interval in the Arbuckle is at a depth of 3405 feet to 4645 feet below land surface and is approximately 3010 feet below the base of the USDW. A review of available data has shown no evidence of faults or fractures in the confining zone within the area of review.

40 CFR §147.2919(b)

The well must be cased and cemented to prevent fluid movement into or between USDWs. The base of the USDW occurs at 395 feet below land surface. Since the surface casing will be set and cemented at 536 feet below land surface and the long string casing will be set at 3405 feet below the land surface and cemented back to surface with 1300 sacks of cement, this is adequate in this case.

40 CFR §147.2920

To assure the protection of USDWs adjacent to the well bore, injection must be through an adequate tubing and packer. The packer must be set within 75 feet of the top of the injection interval. Since the top of the injection interval is at 3405 feet, the packer in this well must be set inside the casing between 3330 and 3400 feet of depth below land surface [40 CFR §147.2920(a)]. Injection pressure at the wellhead shall be limited so that it does not initiate new fractures or propagate existing fractures in the confining zone adjacent to any USDW [40 CFR §147.2920(c)]. In this well, the maximum injection pressure at the wellhead shall not exceed 200 psig.

To assure that USDWs are protected from injection fluids, the well must maintain mechanical integrity. Mechanical integrity must be demonstrated prior to operation and at least once every five years thereafter [40 CFR §147.2920(b)].

For additional information, please contact:

Ms. Evelyn Rosborough
Administrative Support Team (6WQ-CA)
U.S. Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733
(214) 665-7515



Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

UIC Permit No. 06S1261P6063
Well No. Farmland Res. 6-9

AUTHORIZATION TO CONSTRUCT AN INJECTION WELL UNDER THE UIC PROGRAM OSAGE MINERAL RESERVE

In compliance with the provisions of the Safe Drinking Water Act, (hereafter referred to as "the Act" or "SDWA") as amended (42 U.S.C. §300f et seq.),

Sullivan and Company L.L.C.
1437 S. Boulder, Suite 1030
Tulsa, Oklahoma 74119

is authorized to construct a Class II salt water disposal injection well. This well is located at:

147 feet from the north line and 1941 feet from the east line, Northeast Quarter, Section 09, Township 24N, Range 06E into the injection interval at a depth of 3405 feet to 4645 feet below land surface in the Arbuckle in accordance with the construction and operation requirements, injection pressure limits, reporting and monitoring requirements, and other conditions set forth in Parts I and II of this permit and the Osage Class II Underground Injection Control Program and Regulations.

Authorization to inject fluids into the well described in this permit shall be separately granted. Such authorization may be verbally granted by the Chief, Ground Water/UIC Section when the operator has satisfactorily demonstrated compliance with special permit conditions I.A.1., I.A.2., I.A.3., and I.B.1.. Any verbal authorization to inject will be followed by a written "Authorization to Inject" from the Director, Water Quality Protection Division (6WQ). Upon authorization to inject, this permit shall remain in effect until the well is plugged or the permit is terminated.

This permit shall become effective on

Prepared by

Issued on

Bill Hurlbut
Geologist
Ground Water/UIC Section
(6WQ-SG) *BD-14/06*

6WQ-SG: BHURLBUT: 1/4/06 06S1261P6063.1

6WQ-SG 6WQ-S
DELLINGER WRIGHT

246-80

Miguel I. Flores
Director
Water Quality Protection
Division

Part I. SPECIAL PERMIT CONDITIONSA. Construction Requirements

1. Surface casing shall be set at 536 feet below land surface and cemented back to the surface. The long string casing shall be set at 3405 feet below land surface and cemented back to the surface with 1300 sacks of cement.
2. The well shall be equipped with standard female fittings with cut-off valves connected to the tubing and the tubing/casing annulus so that the injection pressure and annulus pressure may be measured by an EPA representative by attaching a gauge having a standard male fitting.
3. Tubing and packer shall be installed. The packer shall be run on the tubing and set inside the casing between 3330 and 3400 feet of depth below the land surface.

B. Operating Requirements

1. Authorization to inject will not be granted until the permittee shows to the satisfaction of the Director, Water Quality Protection Division, pursuant to 40 CFR §147.2920(b)(1)(i) that the well has mechanical integrity. The well's mechanical integrity must be demonstrated prior to the start of injection and at least every five years thereafter. The permittee must notify the Osage UIC office at least five (5) days prior to mechanical integrity testing so that an EPA representative can witness the test.
2. Injection pressure at the wellhead shall not exceed 200 psig.
3. The permittee is authorized to inject salt water for disposal.
4. Injection volume shall be limited to 1,050,000 barrels per month.
5. The operator shall obtain a static fluid level after completion of this well and annually thereafter. The static fluid level will be obtained after a minimum 24 hour shut-in period and reported to EPA, Region 6, Source Water Protection Branch, 6WQ-S.



Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

Scan Code: 17

UIC Permit No. 06S1261P6063
Well No. Farmland Res. 6-9

AUTHORIZATION TO CONSTRUCT AN INJECTION WELL UNDER THE UIC PROGRAM OSAGE MINERAL RESERVE

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Sullivan and Company L.L.C.
1437 S. Boulder, Suite 1030
Tulsa, Oklahoma 74119

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This permit shall become effective on

Prepared by

Issued on

Bill Hurlbut

Geologist

Ground Water/UIC Section

(6WQ-SG) BHURLBUT: 1/4/06

6WQ-SG: BHURLBUT: 1/4/06 06S1261P6063.1f

6WQ-SG 6WQ-S

DELLINGER, WRIGHT

Miguel I. Flores

Director

Water Quality Protection
Division

Part I. SPECIAL PERMIT CONDITIONSA. Construction Requirements

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5. The operator shall obtain a static fluid level after completion of this well and annually thereafter. The static fluid level will be obtained after a minimum 24 hour shut-in period and reported to EPA, Region 6, Source Water Protection Branch, 6WQ-S.